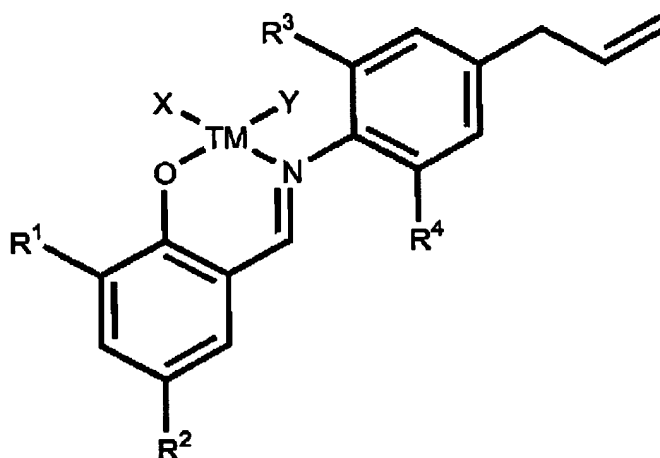


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IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) A composition comprising the product of combining, in the presence of a free radical initiator, a catalyst precursor and at least one catalyst polymerization monomer wherein the catalyst polymerization monomer is polymerizable by free-radical polymerization and wherein the catalyst precursor has the formula:



wherein

- (a) R¹ and R² are independently hydrogen, NO₂, or hydrocarbyl groups;
 - (b) R³ and R⁴ are independently hydrogen or hydrocarbyl groups;
 - (c) TM is a Group-4-11 metal;
 - (d) X is an abstractable ligand; and
 - (e) Y is a neutral Lewis base.
2. (Currently amended) The composition of Claim 1 wherein [[a]] at least one hydrocarbyl group is a C₁-C₅₀ hydrocarbyl group.

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3. (Currently amended) The composition of Claim 2 wherein [[a]] at least one hydrocarbyl group is a C₁-C₄₀ hydrocarbyl group.
4. (Currently amended) The composition of Claim 3 wherein [[a]] at least one hydrocarbyl group is a C₁-C₂₀ hydrocarbyl group.
5. (Currently amended) The composition of Claim 1 wherein the TM is a Group-10 transition metal.
6. (Currently amended) The composition of Claim 1 wherein the TM is ~~selected from~~ Ni.
7. (Currently amended) The composition of Claim 1 wherein the abstractable ligands are independently selected from the group consisting of halide radicals, hydride radicals, hydrocarbyl radicals, [[or]] and hydrocarbyl-substituted, organometalloid radicals.
8. (Currently amended) The composition of Claim 7 wherein the abstractable ligands are independently selected from the group consisting of halide, alkoxide, aryloxy, amide, [[or]] and phosphide radicals.
9. (Currently amended) The composition of Claim 8 wherein the abstractable ligands are independently selected from the group consisting of chloride, bromide, iodide, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, hydride, phenyl, benzyl, phenethyl, tolyl, methoxy, ethoxy, propoxy, butoxy, dimethylamino, diethylamino, methylethylamino, phenoxy, benzoxy, allyl, 1,1-dimethyl allyl, 2-carboxymethyl allyl, acetylacetonate, 1,1,1,5,5,5-hexa-fluoroacetylacetonate, 1,1,1-trifluoro-acetylacetonate, [[or]] and 1,1,1-trifluoro-5,5-dimethylacetylacetonate radicals.
10. (Currently amended) The composition of Claim 9 wherein at least one of the abstractable ligand ligands is chloride.

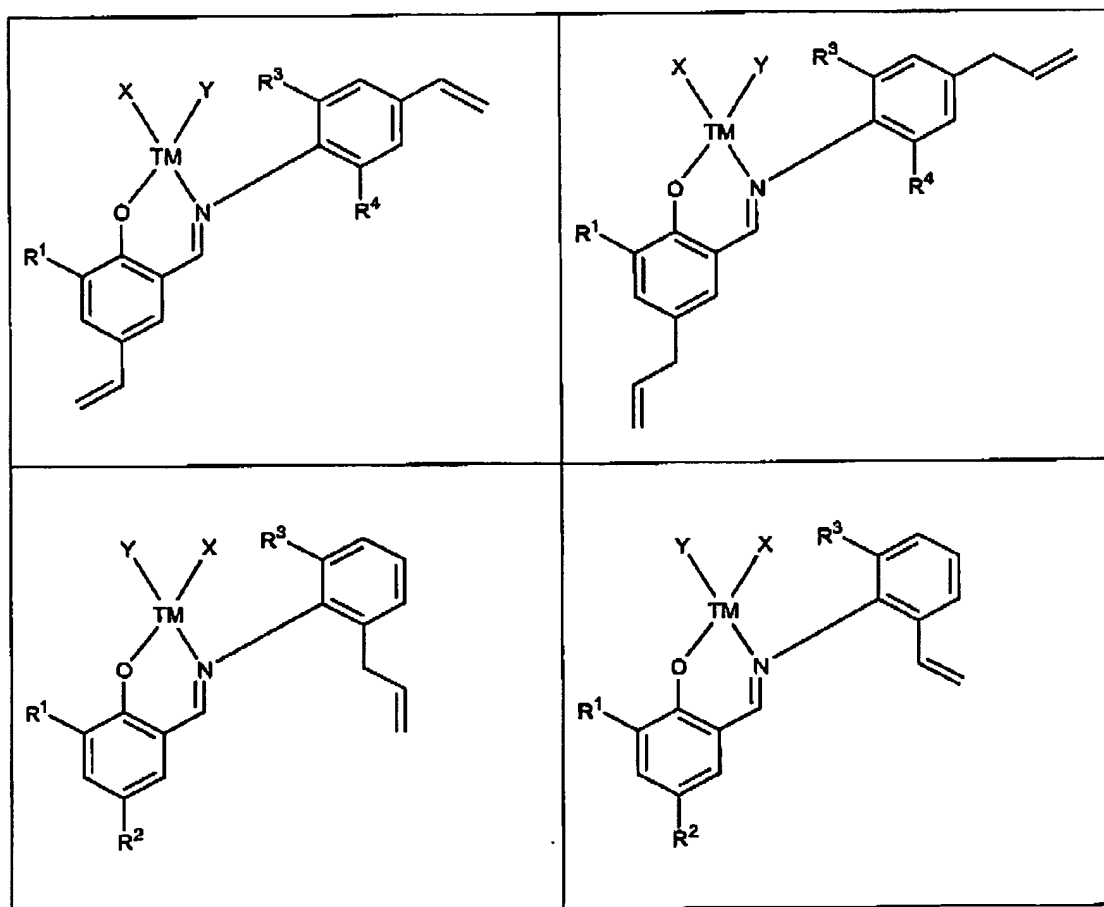
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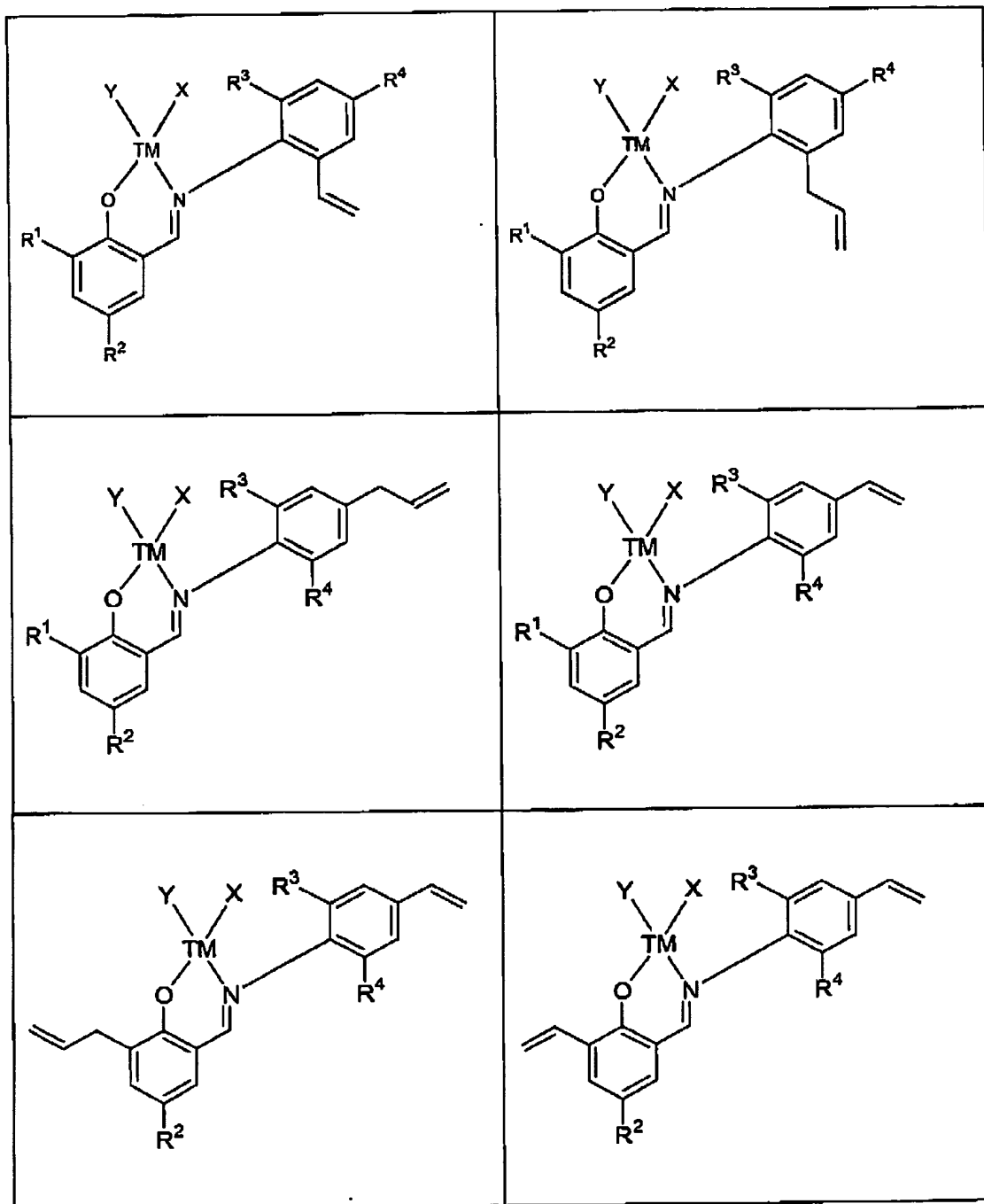
11. (Currently amended) The composition of Claim 1 wherein the catalyst polymerization monomer is ~~selected from~~ styrene, vinyl styrene, alkyl styrene, isobutylene, isoprene, or butadiene.
12. (Original) The composition of Claim 11 wherein the catalyst polymerization monomer is styrene.
13. (Currently amended) The composition of Claim 1 wherein the free radical initiator is selected from the group consisting of azo initiators ~~or~~ and peroxides.
14. (Currently amended) The composition of Claim 13 wherein the free radical initiator is selected from the group consisting of dialkyldiazenes, hyponitrites, diacyl peroxides, dialkyl peroxydicarbonates, peresters, alkyl hydroperoxides, dialkyl peroxides, ~~or~~ and inorganic peroxides.
15. (Currently amended) The composition of Claim 14 wherein the free radical initiator is selected from the group consisting of 2,2'-azobis(2-methylpropanenitrile), 1,1-azobis(1-cyclohexanenitrile), 4,4'-azobis(4-cyanovaleric acid), triphenylmethylazobenzene, di-t-butyl hyponitrite, dicumyl hyponitrite, dibenzoyl peroxide, didodecanoyl peroxide, diacetyl peroxide, diisopropyl ester, dicyclohexyl ester, cumyl hydroperoxide, t-butyl hydroperoxide, dicumyl peroxide, di-t-butyl peroxide, hydrogen peroxide, and persulfate initiators.
16. (Currently amended) The composition of Claim 1 wherein Y is selected from the group consisting of amines, phosphines, ~~or~~ and nitriles.
17. (Currently amended) The composition of Claim 16 wherein Y is selected from the group consisting of triphenyl phosphine ~~or~~ and acetonitrile.
18. (Original) An olefin polymerization method comprising contacting the compositions of Claim 1 with an olefin.

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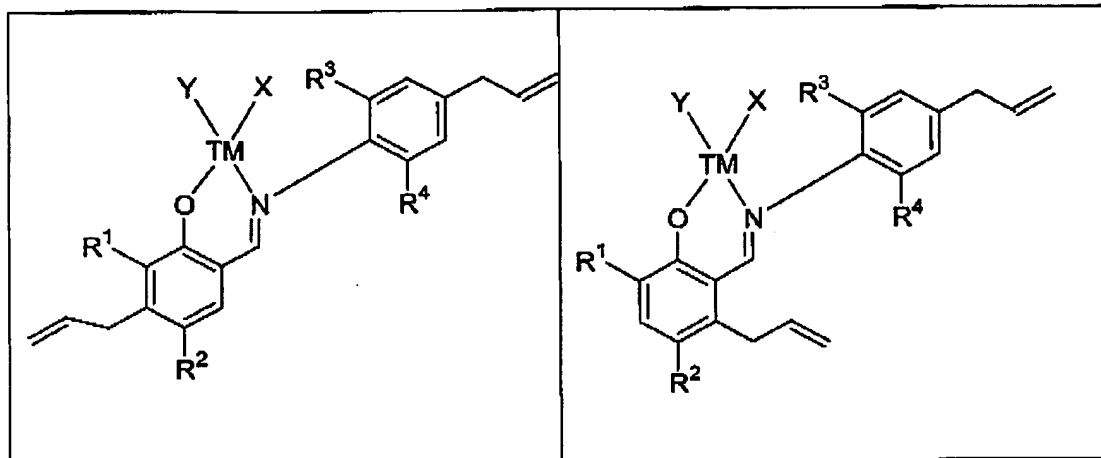
19. (Currently amended) A composition comprising the product of combining, in the presence of a free radical initiator, a catalyst precursor and at least one catalyst polymerization monomer wherein the catalyst polymerization monomer is polymerizable by free-radical polymerization and wherein the catalyst precursor is represented by any one of the following structures: ~~The composition of Claim 1 wherein the catalyst precursor has the formula:~~



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wherein:

- (a) R¹ and R² are independently hydrogen, NO₂, or hydrocarbyl groups;
- (b) R³ and R⁴ are independently hydrogen or hydrocarbyl groups;
- (c) TM is a Group-4-11 metal;
- (d) X is an abstractable ligand; and
- (e) Y is a neutral Lewis base.